

**Claims**

1. Attenuator system (10) for adjusting the output power of an HF signal source (1),  
**characterised in that**  
an electronic attenuator (5) with a mechanical changeover switch at the input-end and at the output-end (3, 4) is arranged between the signal source (1) and an output (2), and that these mechanical changeover switches can be switched in such a manner, that, in one switching position (I), the electronic attenuator (5) is connected between the signal source (1) and the output (2), and in the other switching position (II), a direct bypass line (6) is connected between the signal source (1) and the output (2).  
  
2. Attenuator system according to claim 1,  
**characterised in that**  
the bypass line (6) is formed as a mechanical attenuator, which can be switched by means of mechanical switches between several attenuation values.  
  
3. Attenuator system according to claim 1 or 2,  
**characterised in that**  
the mechanical changeover switches (3, 4) are bi-stable coaxial relay changeover switches.  
  
4. Attenuator system according to claim 1 or 2,  
**characterised in that**  
the mechanical changeover switches (3, 4) are transfer switches.

5. Attenuator system according to any one of the preceding claims,

**characterised in that**

5       the switchgear for the mechanical changeover switches (3, 4) is connected to the output-power setting mechanism of the signal source (1) in such a manner that, above a predetermined output power, the bypass line (6) is connected between the signal 10 source (1) and output (2), and below this predetermined output power, the electronic attenuator (5) is connected between the signal source (1) and output (2).

15 6. Attenuator system according to any one of the preceding claims,

**characterised in that**

the switchgear of the mechanical changeover switches (3, 4) is connected in such a manner to a 20 over-voltage detector (9) assigned to the output (2) of the signal source (1), that, if a permitted level is exceeded at the output (2), the mechanical changeover switch (4) at the output-end disconnects the electronic attenuator (5) from the output (2), and the mechanical changeover switch (3) at the 25 input-end connects the electronic attenuator (5) to the signal source (1).